Influence Analysis of Credit Risk Management System The Organization Performance of Commercial Banking in Indonesia

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ABSTRACT

Credit risk management system of the organization's performance using contingency approach, which consists of four main variables, namely the business strategy, corporate culture, environment and organizational structure. This study reviews the process of credit risk management systems in commercial banks in Indonesia. This study examined the influence of credit risk management system (risk identify, risk mesure mechanism and risk management mechanism) to organization performance.

Bank for International Settlements (*The Basel Committee*, 2000) explained that the credit risk of bank loans as a potential or counterparty will fail in the repayment of its obligations. Credit risk is the risk is greatest and most prominent faced by commercial banks and a major cause of bank failures in recent years faced by the management bank. (Fraser et., al. 2001; Angerer 2004).

The purpose of this model is to know the influence of credit risk management system with commercial bank in Indonesia. This research will be carried out on 97 respondent's level manager/ head of banking credit risk management, data collection with quesionarie measured and using the interval scale. Primary data are tested with multiple regression analysis, where the organization performan as a bound variable (y) and a cecredit risk management system as a free variable (x). the results of regression analysis R^2 figures for 41.1%, F = 2.916 with a significant p less than 0.05, meaning there is a positive relationship (β_1 = 0.421) is significant between the variables of credit risk management systems with organizational performance. Changes in organizational performance variation explained by the variables of credit risk management system for 41.1%, the rest is explained by other variables, this can be predicted in the relationship between credit risk management systems with the performance of public banks that can show results more powerful.

Key word: credit risk, management system, organization performance

Introduction

The phenomena of disintermediation in the United States of America is the beginning of the emergence of credit crunch issue, the inhibition of banking credit as a result of a very tight monetary policy to tackle inflation promoted by the Federal Reserve. The summary of several scientific research findings, such as of Stiglitz and Weiss (1981); Bernanke and Lown (1991); Lesmana (2006) revealed that there was a sharp decline of the distribution of banking credits caused by the decline of banking credit distributing activities to the business world. These researchers also encouraged the banks to handle credit risks more cautiously with more adequate facilities.

Government efforts aimed at increasing the distribution of banking credit are worked out through giving credit guarantee and evaluating banking business plan as a form of evaluation to determine how far have the banks make internal preparations and external overcomings for credit risks probabilities.

Polonchek and Miller (1999); Allen and Gale (2000) through their researches, concluded that the impact of the financial weaknesses in a department will weaken the other related departments. This requires separate security and monitoring systems in the financial/ banking institutions regarding their credit distributions. By doing so, the impact of the debtors' financial weakness will not affect creditors. Kunreuther and Heal (2002); Lesmana (2006) suggested that the banks need independent security as a securing system for the risks of the distributed credit which is a specific credit risk management model as accurate anticipative management on credit risks. Giesecke (2002), in his study towards the failure of the fulfillment of obligations by the debtors, revealed that one of the factors of which case is the imperfect information owned by investors or banks. Such failures may cause the transmission of financial defficiency to investors or banks in terms of approving credits.

Bank for International Settlements (Basel Committee on Banking Supervision, 2000) described credit risk as the failure of payment obligation of a banking loan. Credit risk is mostly associated with loans and securities in the bank's balance sheet, and it is the biggest risk faced by commercial banks. Credit risk is the main cause of banking failure in the last year and the credit risk is the most prominent risk faced by the banking management. (Fraser et., al. 2001; Angerer 2004).

The problem of banking credit distribution obstacle has made the government to issue a special credit policy to improve credit numbers, such as providing credit guarantee and evaluating the banking business plan. The evaluation of the business plan will show how far the efforts of banks in handling the credit risks that may occur. In 1997 and 1998, monetary crisis hit Indonesia, weakening the policy and management of banking loans and making many banks having hard times in determining credit policies. This case shows off that the knowledge of handling of credit risks is still at minimum point in Indonesian banking. Therefore, it is of a great need to conduct a research aimed at figuring out one fine anticipatory model of banking credit risk management.

Credit risk management is a joint activity of the identification, measurement, remedy selection, control and supervision on credit risks. The modeling of credit risk management activities and the ease in running its application requires the creation of a simple model of anticipation, but may reflect the credit risk monitoring on each debtor through banking operational quality management. The model is expected to be adopted by banks in assessing monitoring quality (level) and understanding the factors making the level credit risk from each debtor high.

Agung (1998 and 2000) explained that the banking credit division became one of the indicators of successful management of funds in addition to the other divisions, beginning with credit procedures, types of credit being promoted, the approach of authority in the approval and granting of loans according to agreement. There are several approaches used to monitor the banking loan approval process, such as recognizing the parties involved in the process of granting credits, facilities and monitoring equipment after credits are disbursed and the repayment process.

Several previous Researches have tested a number of contingency factors affecting the corporate management controling system, such as monitoring system aimed at improving corporate performance (Govindarajan and Fisher 1990; Fisher 1998; Hendricks et., al. 2004). Based on the occuring credit risk issues, the researcher initiated to conduct a research to figure out the effect of contingency variables on the effectiveness of controling systems in credit risk management.

The framework of risk management discussed in this research includes the entire scope of banking credit activities based on the need balance between an effective fcnction of credit monitoring and a clear procedure of risk management. The basic principles of risk management framework can be summarized as follows.

Table 1.
The Basic Principles of Banking Credit Risk Management Framework In Three Classifications

Credit Types	Credit Approval Authority Approach	Parties involved	Monitoring Facilities and Tools
Corporate	Centralization	• Divisions of Medium Business and Corporate • Credit Divisions	Credit Risk Scoring System
Big-scaled Commercial and Retail	Desentralization	• Heads of Regional Office • Regional Credit Centres	Credit Risk Scoring System
Retail, SMEs and Consumers	Decentralization and Automation	• Heads of Branch • Application systems of info flow	Credit Risk Scoring System

Source: the Annual Report of the Bank of Indonesia (2003)

Table 1. highlights that the application of credit risk management control through the approach of contextual variables on the performance of commercial banks need to be done intrinsically to describe all aspects of credit scoring and credit approval process granted to the debtors via the identification process of credit risk, credit risk measurement and credit risk monitoring/ control. (The Annual Report of the Bank of Indonesia, 2003). The problem formulation the researcher can highlight are as follows are there any relations between credit risk management system and the performance and what are its significance?

Hypothesis Formulation

Realizing the fact that there are limits, and to support research hypothesis with accurately empirical evidence, then the managers/heads of credit risk management of commercial banks that will be assessed are selected based on criteria that they are ones who have carried out credit risk management for 5 (five) years, from 2004 up to 2008. This is done in order to make the research findings predictable and explainanble in detail, so it can become a hypothesis with empirical evidence. This research would test whether or not the results of credit risk management tested in a model could work well in the process of improving the quality of credit risk handling, particularly in the implementation of credit risk management function. This research specifically describe four phases as the sub-sections of the aims of the research as follows testing the significance of credit risk management system on organizational performance.

Credit risk management process is done in order to minimize the level of emerging credit risk to the acceptable limits. If the risks faced by a company have been identified and measured, then the effort to improve quality and predictability of corporate earnings will grow bigger. Besides that, the company will be able to optimize shareholder value, reduce the likelihood of pressure on the financial capacity, and maintain operating margins.

Financial ratio is one of the forms of financial statements analysis of which its usage is varied in accordance with the flexibility ratio, such as predicting the success of the company or constructing a research model. Back, et., al. (1996) conducted a test by using financial ratios as the detector of the quality of banking credits, such as *Total debt / Equity, Cash flow / Total debt, net sale / Total assets, Quick assets / Total assets.*

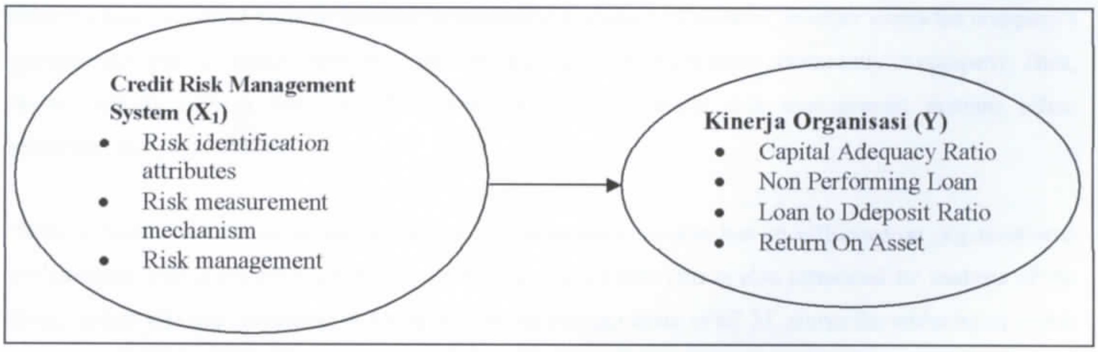

Figure 1. **Hypothesis Model**

The hypothesis is credit risk management systems affect organizational performance. Analysis tool used is *multiple regression analysis* can be seen in equation which is: $Y = \alpha + \beta_1 X_1$, note Y is organizational performance, α, β_1 is *unstandardized* regression coefficient and X_1 is credit risk management system.

Result and Analysis

This research will be carried out on 97 respondent's level manager/head of banking credit risk management, data collection with quesionarie measured and using the interval scale. Here are the results of testing the effects of credit risk management systems to organizational performance.

Table 2. **Regression Results Variable Credit Risk Management System the Performance Organization**

Variable	Koefficient	Value	t-test	p-value
Constant	α	13.372	2.814	0.006
Credit Risk Management System	β_1	0.421	1.384	0.016
$R^2 = 0.411$ and $F = 2.916$				

Source: primary data is processed

Table 2. shows the results of regression analysis R^2 figures for 41.1%, F = 2.916 with a significant p less than 0.05, meaning there is a positive relationship (β_1 = 0.421) is significant between the variables of credit risk management systems with organizational performance. Changes in organizational performance variation explained by the variables of credit risk management system for 41.1%, the rest is explained by other variables, this can be predicted in the relationship between credit risk management systems with the performance of public banks that can show results more powerful. These results are consistent with research results Govindarajan and Fisher (1990), Koach and Scott (2000), who states that the high effectiveness of control systems in order to improve corporate performance, in other words the company's performance can be further improved if the use of control systems applied consistently in company. Thus, these findings support the research hypothesis that is a credit risk management systems affect organizational performance.

Table 2. prove that the variables of credit risk management system has an influence on organizational performance with a positive coefficient results and significant. This is also supported by analysis of the Banks group mixture consisting of 15 banks, has an average score of 67.33, above the midpoint of which is owned 67.00, then it is often applied to a large extent on bank operations (ranging from a score of 5 to 6 values). There are also analytical support to the Foreign Banks group consists of 8 banks with an average score of 70.12, above the midpoint of which is owned 70.00, above the midpoint of which is owned 32.00, also is often applied to a large extent on bank operations (ranging dominant value 6). The efforts made by many banks and foreign banks mixture is to build cooperation with banks or other banks, such as that conducted by PT Bank Negara Indonesia, Tbk with ABN Amro Bank to strengthen credit risk management that focuses on consulting and supervision through the Operational Risk Management (ORM). PT Bank Negara Indonesia, Tbk in the year 2008 has a value of Capital Adequacy Ratio (CAR)

for 15:13%. Non-Performing Loan (NPL) of 6:53% and Loan to Deposit Ratio (LDR) of 73.20%. Similarly, ABN Amro Bank in 2008 has the value of Capital Adequacy Ratio (CAR) for 16:18%. Non-Performing Loan (NPL) is low enough for 1.15% and Loan to Deposit Ratio (LDR) of 92.57%. Through such cooperation, the two banks to apply ORM with the best standards. In addition, helped improve the competitiveness in the global banking market and enhance corporate value. Basically the application of credit risk management system is to support the company's performance (for performance risk) that will open the barrier uncul if implemented risk management systems.

Strengthening the implementation of credit risk management system which includes the creation of the company implemented a risk and capital committee, drafting new regulations on the granting of credit, and the centralization of credit management and implementation of performance measurement systems by implementing a better quality. In addition, credit approval must be processed separately by business managers and managers of credit risk (four eyes principles), then had to various experiences and learn from each other with foreign banks and banks such mixtures, ABN Amro Bank is already implementing a comprehensive concept of ORM and very credible in anticipation of all business risks. Meanwhile, ABN Amro Bank through the Global Risk Advisory Services stated that the main thing in pemperkuat credit risk management system is the availability of qualified human resources and infrastructure support of information technology systems (IT) in addition able to analyze up to anticipate the risks that might happen, including the implementation of management reporting credit risk together to give advice when a problem occurs in order to manage risk and control it properly.

Conclution

The result of analysis test show positive relationship contribution and significant between the variables of credit risk management systems with organizational performance. Changes in organizational performance variation explained by the variables of credit risk management system for 41.1%, the rest is explained by other variables, this can be predicted in the relationship between credit risk management systems with the performance of public banks that can show results more powerful.

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